

SLWK 1528.034US1  
Garmin 702.164

antenna 214 through GPS receiver 238 via line 240. The processor 236 interacts with an operating system (such as PalmOS; Pocket PC) that runs selected software depending on the intended use of the PDA. Processor 236 is coupled with memory 242 such as RAM via line 244, and power source 246 for powering the electronic components of the PDA. The processor 236 communicates with touch sensitive display screen 226 via data line 248.

The electronic components further include other input sources that are connected to the processor 236. Control buttons 228 are connected to processor 236 via line 250 and a map data cartridge 233 inserted into cartridge bay 232 is connected via line 252. A conventional serial I/O port 254 such as a USB port is connected to the processor 236 via line 256. Cellular antenna 216 is connected to cellular transceiver 258, which is connected to the processor 236 via line 266. Processor 236 is connected to the speaker/headphone jack 234 via line 262. One embodiment of the PDA includes an infrared port (not explicitly shown but is generally shown as transceiver 260) coupled to the processor 236 that may be used to beam information from one PDA to another, as will be explained in more detail below.

The electronic components include a memory 242, which is adapted to store and/or house a set of executable instructions, programs, and/or program modules. The memory 242 is adapted to communicate with the processor 236 via line 244. The memory 242 is further adapted to store or house navigation-related data and is adapted to house or store software operable to perform various algorithms such as algorithms for generating track logs, for monitoring a distance traveled, and for calculating routes. Examples of routing algorithms include, but are not limited to, routing algorithms as described in commonly assigned applications entitled: "Systems and Methods for a Navigational Device with Improved Route Calculation Capabilities," application serial number 10/028,087, "Systems and Methods for a Navigational Device with Forced Layer Switching Based on Memory Constraints,"

10/028,087 now U.S. Pat. No. 6,545,637

SLWK 1528.034US1

Garmin 702.164

application serial number 10/027,159 now U.S. Pat. No. 6,581,003  
 "Systems and Methods for a Navigational  
 Device with Automated Next Turn Page," application serial number 10/029,917  
 "Systems and Methods for a Navigational Device with Voice Guidance," application  
 serial number 10/029,732 and "Systems and Methods for a Navigational Device with  
 Detour Routing Capabilities," application serial number 10/028,343 now U.S. Pat. No. 6,687,615  
 each of which is  
 incorporated herein in full by reference.

The navigation-related data includes cartographic data. The cartographic data includes a number of locations and data indicative of thoroughfares of a plurality of types connecting certain ones of the locations. In one embodiment, the navigation-related data includes a calculated route between at least two of the number of locations. Further, according to the teachings of the present invention, the software stored or housed within memory 242 includes software operable to perform one or more applications for navigation. As used herein, software operable to perform one or more applications for navigation includes, but is not limited to, software operable to find points of interest, to calculate a route and determine a travel distance from the route, to maintain a track log and determine a travel distance from the track log, and to monitor travel from a location. In various embodiments, the navigation-related data includes, but is not limited to, various combinations of map features, waypoints, planned routes, points of interest, location data, and/or track logs. In various embodiments, the points of interest include geographical points of interest, entertainment venues, dining venues, historical points of interest, and/or lodging venues. In various embodiments, the navigation-related data include automobile navigation data, marine craft navigation data, pedestrian navigation data, and/or hiking navigation data.

The electronic components include a transceiver 260 coupled to the processor 236 via line 261. As stated above, the memory 242 is adapted to store or house software. According to the teachings of the present invention, software is provided which includes a set of executable instructions, programs, and or program